# OR-8. PERYLENE-3-CARBALDEHYDE AND PERYLEN-3-YLMETHANOL: SYNTHESES AND SPECTRAL-FLUORESCENT STUDIES OF THE LIPOSOME LOADING

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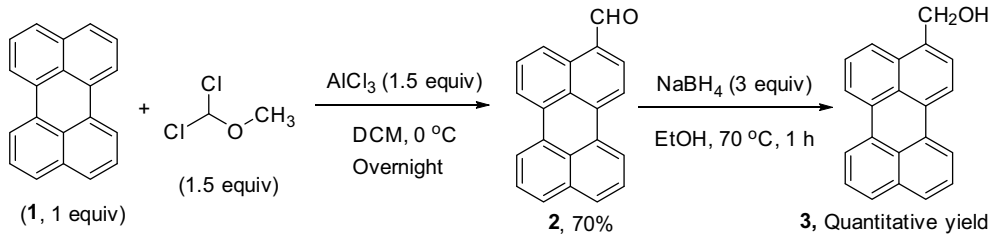
Fluorescence imaging has emerged as a very powerful technique to monitor bio-molecules and biological processes in complex biosystems [1]. Among the fluorescent dyes, pyrene is widely investigated because of its characteristic fluorescent behavior: microenvironment around pyrene greatly affects the fluorescence intensity. By using perylene as a fluorophore instead of pyrene, improvement of sensitivity is expected. Furthermore, perylene is also known to form excimer as pyrene does: its emission maximum appears at ca. 530 nm [2]. Herein, we are pleased to report a convenient method for the synthesis of perylene-3-carbaldehyde (**2**) followed by perylen-3-ylmethanol (**3**) (Scheme). Future work will include biological assays such as cytotoxic studies and cell imaging by the promising perylene derivative dyes.




Synthetic route to perylene-3-carbaldehyde and perylen-3-yl-methanol

## References

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